

Portland Harbor Superfund Site Briefing Paper

November 24, 2009

Site Description and Background: The Portland Harbor site is an 11-mile reach of the Willamette River between downtown Portland and the Columbia River. The site was added to the NPL in 2000 based on sediment contamination associated with historic industrial operations. The site is primarily industrial, but also provides recreational opportunities, aquatic habitat and is an important migratory corridor for ESA listed salmonids. Ongoing sources of contamination to Portland Harbor include urban stormwater and contaminated groundwater discharges. A federally maintained navigation channel doubles the natural depth of the river and allows passage of large ships into the harbor area.

A group of Potentially Responsible Parties (PRPs) known as the Lower Willamette Group (LWG), consisting of 14 private and public entities is conducting a multi-year Remedial Investigation (RI) and Feasibility Study (FS) at the Portland Harbor site with EPA oversight under a 2001 Consent Order. EPA is the lead agency for the in-water investigation, with assistance from the Oregon Department of Environmental Quality (DEQ), six Tribal Governments (the Yakama, Grand Ronde, Siletz, Warm Springs, Umatilla, and Nez Perce Tribes), NOAA, and federal and state fish and wildlife agencies. DEQ is the lead agency for source control, which includes identifying and controlling ongoing sources of contamination to the Site.

Site Status: A major project milestone was achieved when the LWG delivered the draft Portland Harbor RI Report, including the baseline risk assessments, to EPA on October 27, 2009. The RI report presents a comprehensive look at the nature and extent of contamination in surface and subsurface sediment, fish and shellfish tissue, surface water, groundwater, and stormwater. Approximately 7500 samples were collected. It also describes the physical features, current and historical land and harbor uses and fish and habitat areas of the river and nearby lands. EPA is currently reviewing the report and working with the LWG to scope out the FS, which will evaluate cleanup options. The FS is expected to be submitted in late 2010. If these reports meet EPA expectations, EPA anticipates issuing a Proposed Plan for public comment in 2011 and a Record of Decision (ROD) in 2012.

Site Risks:

- Risks to both human health and the environment are primarily due to PCBs (up to 35 mg/kg total PCBs in surface sediment and eight localized source areas with contaminant levels above 1 mg/kg) and dioxins and furans. PAHs, pesticides, tributyl tin, other metals and VOCs also pose unacceptable risk at Portland Harbor. The greatest risk of human health effects is from ingestion of resident fish.
- The highest risk to ecological receptors is to benthic organisms exposed to contaminated sediment and groundwater, and the wildlife that consumes contaminated prey.
- Background levels of PCBs associated with the Willamette River watershed will be a factor in reducing the risk associated with fish consumption to acceptable levels.

Other Site Accomplishments:

- The Port of Portland completed a partial cleanup of the Terminal 4 facility in 2008 under an early action agreement with EPA. Contaminated sediment was dredged and capped, the riverbank was stabilized and habitat was enhanced. The final phase, constructing a Confined Disposal Facility, was delayed in order to incorporate information from the harbor wide Feasibility Study.
- BP-Arco completed a partial cleanup of nearshore contaminated sediment at their bulk fuel facility in 2008. This work was performed in conjunction with facility improvements to the seawall and took place with oversight from DEQ.

- NW Natural conducted a removal action in 2005 that removed 15,000 cubic yards of tar from the Willamette near their GASCO facility.
- DEQ is actively investigating over 80 upland facilities and is making significant progress moving source control efforts forward at some of the highest priority upland sites.

Issues raised by Congressman Blumenauer and Senator Merkley:

- Schedule - Optimistic early schedules targeted a ROD in 2008, but given the size and complexity of the site, it soon became apparent that completing a rigorous analysis and working through difficult multi-media issues would take substantially more time. All parties will need to work cooperatively and aggressively to meet the projected 2012 ROD date.
- Cost - The LWG has assured EPA that they have sufficient funding to complete the RI/FS, and told EPA that their current expenditures exceed \$74 million.
- EPA resources - EPA has arranged for the necessary personnel and expertise to support the FS by using contractors and the U.S. Army Corps of Engineers Environmental Dredging Research Center. EPA has been scoping the FS both internally and collaboratively with the LWG since early 2009.
- EPA has developed a Remedial Action Objective for groundwater at the site. EPA and DEQ are working together to determine how to integrate groundwater source control actions with in-water source control remedies.

Community Issues:

- The Portland Harbor Community Advisory Group (CAG) has been actively engaged with EPA since shortly after the site was listed. EPA regularly attends the CAG's monthly meetings and makes presentations to neighborhood associations and other interest groups. EPA also provides TAG funding to Willamette Riverkeeper to support a technical consultant, who is reviewing the key project documents on behalf of the CAG.
- Numerous technical documents and reports have been posted to EPA Region 10's website to keep the public informed of the progress of the RI/FS, early actions and source control. EPA uses a listserve to distribute information to hundreds of interested parties and notify the public of documents available for review.
- CAG members have expressed opposition to the Terminal 4 Confined Disposal Facility and advised EPA of their preference for treatment as a tool for remediating contaminated sediment. Community concerns also include minimizing short term impacts during cleanup, reducing risk to river-adjacent communities and river users, and making sure responsible parties are held accountable.
- Oregon Department of Human Services issued a fish advisory for the Portland Harbor area based on elevated PCB levels in resident fish. Multi-lingual warning signs have been posted at several locations in the harbor area advising women of childbearing age and children to avoid eating bass, catfish, and carp; others should limit consumption to one meal/month.

Other Issues:

- Although DEQ is making progress, identifying and controlling dozens of upland sources of contamination prior to implementing a sediment remedy is a significant workload and presents some schedule challenges.
- As part of an ongoing search and identification of PRPs, EPA has sent out approximately 280 104(e) information requests and 92 General Notice of Potential Liability Letters.
- Federal, State and Tribal Natural Resource Trustees are conducting an assessment of natural resource damages associated with contaminant releases at the Portland Harbor site. Phase 1

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work on the assessment is underway, and the trustees will be looking for additional funding to complete later phases of the assessment.

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